



# University of Hawaii at Manoa

Environmental Center  
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June 15, 1984

RP:0040

Mr. Shinji Soneda, Chief  
Environmental Protection and  
Health Services Division  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Dear Mr. Soneda:

NPDES Permit No. HI 0000281  
California and Hawaiian Sugar Company  
Aiea Refinery  
Aiea, Oahu

We would like to call your attention to the difference between the effluent temperature indicated in the application filed by C&H for the Zone of Mixing (ZOM) to accommodate their discharge and that indicated in the NPDES permit application.

On the application for the ZOM dated (March 5, 1984), under Quality of Discharge (p. 2), the effluent temperature is stated to be 95°F. In the application for the NPDES permit application (p. 2) the present daily average temperature of the discharge is stated both to be 41°C (105.8°F) and 43°C (109.4°F). The proposed final temperature effluent limitations are 41°C daily average and 43°C maximum daily.

We believe that the discrepancies between the application for the NPDES permit and the application for the ZOM should be accounted for before the NPDES permit terms are finalized.

We appreciate the opportunity to comment on this NPDES permit.

Yours truly,

Doak C. Cox  
Director

cc: Jacquelin Miller  
Antonio De Oteyza  
Pamela Bahnsen

November 2, 1984

The 1983 amendments to the Hawaii Revised Statutes Section 205-33 permits offshore sand mining by the City or State for public beach replenishment at certain specific beaches in the State. Kualoa Beach was not one of the so designated beaches. The sand mining equipment originally developed by the University of Hawaii and successfully tested at Keahou on the Big Island was acquired by SEACO, a local marine engineering firm. Since then the equipment has been further refined and modified to permit its use under a wide variety of environmental conditions including depths and locations such as would be encountered off Kualoa. The new configuration includes a skid-mounted system which operates much like a vacuum cleaner. It is not limited to deep sand deposits but may be used to skim only inches of sand from shallow surface deposits. Furthermore it operates from a trailered small craft (such as a Boston whaler) and requires only two people for its operations. Turbidity is said to be negligible. If adequate tests were undertaken of this latest sand mining equipment, the restriction of its use to selected beaches might be reconsidered by the legislature. If the sand mining option is considered more acceptable given the new vacuum equipment available perhaps some mining tests could be initiated for eventual presentation to the legislature.

In either case, the installation of the surgebreakers or the use of the portable sand mining system, we strongly recommend that periodic monitoring of specific environmental parameters be made a part of any permit. Either method is somewhat experimental. Background data to document the effectiveness (or lack thereof) is essential for wise planning for future beach replenishment projects.

We hope you will find our comments useful in your decision making process.

Yours truly,

*Doak C. Cox*  
Doak C. Cox  
Director

cc: Ralph Moberly  
Matthew Spriggs  
Frans Gerritsen  
Jacquelin Miller